

LISTING OF CLAIMS

1. (Previously Presented) A display entity for use in presenting a visual depiction of a physical or logical process entity associated with a process plant to a user via a display device, the display entity comprising:
 - a computer readable memory; and
 - a display object associated with the process entity, stored on the computer readable memory, and executable by a processor, the display object including:
 - a value of a property associated with the process entity; and
 - a multiplicity of graphic visualizations of the process entity, wherein one of the multiplicity of graphic visualizations is displayed on a display device as a graphic representation of the process entity when the display object is executed by a processor.
2. (Original) The display entity of claim 1, wherein the identity of the one of the multiplicity of graphical visualizations that is to be displayed on the display device when the display object is executed is selectable.
3. (Original) The display entity of claim 1, wherein the display object further includes an indication defining one of the multiplicity of graphic visualizations as a default graphic visualization.
4. (Original) The display entity of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process entity according to a first graphical standard or norm and a second one of the multiplicity of graphic visualizations depicts the process entity according to a second graphical standard or norm.

5. (Original) The display entity of claim 4, wherein the first graphical standard or norm is associated with an oil and gas industry graphical standard or norm or with a pharmaceutical industry graphical standard or norm.

6. (Original) The display entity of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process entity according to a first graphical style and a second one of the multiplicity of graphic visualizations depicts the process entity according to a second graphical style.

7. (Original) The display entity of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process entity in a manner designed for display on a first type of display device and a second one of the multiplicity of graphic visualizations depicts the process entity in a manner designed for display on a second type of display device.

8. (Original) The display entity of claim 7, wherein the first type of display device is a standard computer screen and the second type of display device is a handheld display device associated with a personal data assistant or a wireless telephone.

9. (Original) The display entity of claim 7, wherein the first type of display device includes a display screen that is significantly different in size than the second type of display device.

10. (Original) The display entity of claim 1, wherein a first one of the multiplicity of graphic visualizations depicts the process entity in a manner associated with a first function within the process plant and a second one of the multiplicity of graphic visualizations depicts the process entity in a manner associated with a second function within the process plant.

11. (Previously Presented) The display entity of claim 1, wherein the display object is executable to accept and store different ones of the multiplicity of graphic visualizations at different times.

12. (Previously Presented) The display entity of claim 1, wherein the display object is executable to change graphic visualizations to use in a display after the display object associated with the display.

13. (Previously Presented) The display entity of claim 1, wherein the display object is executable to store different ones of the multiplicity of graphic visualizations created by different designers, so that a second one of the multiplicity of graphic visualizations may be created by a different person than a first one of the multiplicity of graphic visualizations.

14. (Original) The display entity of claim 1, wherein the display object further includes a routine that executes when the display object is executed to perform an operation with respect to the value of the property stored in the property memory.

15. (Previously Presented) The display entity of claim 1, wherein the display object further includes an animation routine that animates one of the multiplicity of graphic visualizations based on the value of the property.

16. (Previously Presented) The display entity of claim 15, wherein the animation routine animates the one of the multiplicity of graphic visualizations by applying at least one of a skew, a rotation, a translation, a resizing, or a color change to the one of the multiplicity of graphic visualizations.

17. (Original) The display entity of claim 15, wherein one of the multiplicity of graphic visualizations enables a user to interact with the one of the multiplicity of graphic visualizations to perform a function.

18. (Original) The display entity of claim 17, wherein the function includes specifying a change to a value within a runtime environment.

19. (Original) The display entity of claim 18, wherein the runtime environment includes a control routine.

20. (Original) The display entity of claim 15, wherein the executable routine detects a condition associated with the process entity and indicates the detected condition via the one of the multiplicity of graphic visualizations.

21. (Original) The display entity of claim 20, wherein the executable routine detects a state associated with the process entity and indicates the state via the one of the multiplicity of graphic visualizations.

22-37. (Canceled)

38. (Previously Presented) A graphic display for use in a process plant to represent the interconnections between one or more physical or logical entities within the process plant, the graphic display comprising:

a plurality of graphical objects interconnected together, wherein each of the graphical objects is associated with and includes a visual representation of a physical or a logical process entity to be displayed on a display screen during execution of the graphic display; and

a value for a property associated with at least one of the physical or logical process entities;

wherein at least one of the plurality of graphical objects includes two or more visual representations of a physical or a logic process entity and an indication of which of the two or more visual representations to display on a display screen during execution of the graphic display.

39. (Previously Presented) The graphic display of claim 38, wherein the value for a property is bound to data source of a runtime environment within the process plant to receive data associated with the property during the execution of the graphic display.

40. (Original) The graphic display of claim 38, further including a routine that changes at least one of the two or more visual representations of the one of the plurality of graphic objects during execution of the graphic display.

41. (Original) The graphic display of claim 40, wherein the routine comprises an animation routine that animates the one of the two or more visual representations of the one of the plurality of graphic objects during execution of the graphic display.

42. (Original) The graphic display of claim 38, wherein the indication of which of the two or more visual representations to display is user changeable.

43. (Original) The graphic display of claim 38, wherein a first one of the two or more visual representations of the one of the plurality of graphic objects depicts the process entity according to a first graphical standard or norm and a second one of the two or more visual representations of the one of the plurality of graphic objects depicts the process entity according to a second graphical standard or norm.

44. (Original) The graphic display of claim 38, wherein a first one of the two or more visual representations of the one of the plurality of graphic objects depicts the process entity in a manner suited to be displayed on a first type of display device and a second one of the two or more visual representations of the one of the plurality of graphic objects depicts the process entity in a manner suited to be displayed on a second type of display device.

45. (Original) The graphic display of claim 44, wherein the first type of display device includes a display screen that is significantly different in size than the second type of display device.

46. (Previously Presented) The graphic display of claim 38, wherein the display object is executable to accept different ones of the two or more graphic visualizations at different times.

47. (New) A graphical display configuration system for use in creating a display representing the interconnections between one or more physical or logical process entities within a process plant, the system comprising:

a computer-readable storage medium having stored thereon one or more sets of instructions executable by a processor, the one or more sets of instructions comprising:

a library of one or more graphic objects, each graphic object associated with a process entity, executable to store a value of a property associated with the process entity, and including one or more graphic visualizations of the process entity, wherein one of the graphic objects includes a multiplicity of different graphic visualizations of the process entity, and one of the one or more graphic visualizations is selectable to be displayed on a display device as a graphic representation of the process entity when the graphic object is executed by the processor; and

a display editor module executable to create an executable graphic display object that represents an operation of the one or more process entities, the display editor comprising a graphically-based editor canvas routine that enables a user to define the executable graphic display object by placing indications of one or more graphic objects from the library of graphic objects onto an edit canvas to define a manner in which graphic visualizations of the one or more graphic objects will be displayed on the display device during execution of the graphic display object, wherein the graphically based editor canvas routine enables the user to select, when the one of the graphic objects is placed into the edit canvas, between the multiplicity of different graphic visualizations to be displayed upon execution of the one of the graphic objects.

48. (New) The graphical display configuration system of claim 47, wherein the identity of the one of the multiplicity of graphical visualizations that is to be displayed on the display device when the graphic object is executed is selectable.

49. (New) The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity according to a first graphical standard or norm and a second one of the multiplicity of different graphic visualizations depicts the process entity according to a second graphical standard or norm.

50. (New) The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity according to a first graphical style and a second one of the multiplicity of different graphic visualizations depicts the process entity according to a second graphical style.

51. (New) The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity in a manner designed for display on a first type of display device and a second one of the multiplicity of different graphic visualizations depicts the process entity in a manner designed for display on a second type of display device.

52. (New) The graphical display configuration system of claim 47, wherein a first one of the multiplicity of different graphic visualizations depicts the process entity in a manner associated with a first function within the process plant and a second one of the multiplicity of different graphic visualizations depicts the process entity in a manner associated with a second function within the process plant.

53. (New) The graphical display configuration system of claim 47, wherein the graphic object is executable to accept and store different ones of the multiplicity of different graphic visualizations at different times.

54. (New) The graphical display configuration system of claim 47, wherein the graphic object further includes an animation routine that animates one of the multiplicity of different graphic visualizations based on the value of the property.

55. (New) The graphical display configuration system of claim 47, further including a property definition canvas routine executable to enable a user to define the property associated with the one of the one or more graphic objects and a binding definition routine executable to enable a user to specify a binding between the property and a runtime environment within the process plant.

56. (New) The graphical display configuration system of claim 55, further including a script definition routine executable to enable a user to define an executable routine that operates on the property.

57. (New) The graphical display configuration system of claim 56, wherein the script definition routine operates in conjunction with an animation routine that animates the selected one of the multiplicity of different graphic visualizations of the one of the graphic objects.

58. (New) The graphical display configuration system of claim 57, wherein the script definition routine enables a user to define the executable routine as a routine that detects a condition associated with the process entity and that indicates the detected condition with a change to the selected one of the multiplicity of different graphic visualizations of the one of the graphic objects.